Notice of Allowability	Application No.	Applicant(s)	
	10/803,998	GEIGER ET AL.	
	Examiner	Art Unit	
	Allen C. Ho	2882	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *2/2/06*.

2. ☒ The allowed claim(s) is/are *1-30*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Donald J. Daley (Reg. No. 34,313) on 14 February 2006.

The application has been amended as follows:

Claim 1, line 7, "an image detector" has been replaced by --the digital radiation image receiver--.

Allowable Subject Matter

2. Claims 1-30 are allowed.

3. The following is an examiner's statement of reasons for allowance:

With regard to claims 1-9 and 20-26, the prior art fails to teach or fairly suggest a method for the compensation of image disturbances in the course of radiation image recording caused by defocusing of an antiscatter grid arranged in the beam path between a beam source and a digital radiation image receiver and focused with respect to a specific distance from a focus of the beam source, the image disturbance being caused by a defocusing-dictated attenuation of primary radiation incident on the radiation image receiver, the digital radiation image receiver including

radiation-sensitive pixels arranged in matrix form and a device for pixel-wise amplification of the radiation-dependent signals, the method comprising the step of amplifying at least some of the signals supplied by the digital radiation image receiver in pixel-wise fashion in a manner dependent on an actual distance of the antiscatter grid from the focus as claimed.

With regard to claims 10-19, 27, and 28, although the prior art discloses an apparatus comprising a beam source including a focus, a digital radiation image receiver with radiation-sensitive pixels arranged in matrix form, an antiscatter grid arranged between the beam source and the digital radiation image receiver, it fails to teach or fairly suggest an assigned device for the pixel-wise amplification of at least some of the signals supplied by the digital radiation image receiver in a manner dependent on the actual distance of the antiscatter grid from the focus as claimed.

With regard to claim 29, the prior art fails to teach or fairly suggest a method comprising the step of amplifying at least some of signals supplied in pixel-wise fashion from a radiation image receiver in a manner dependent on an actual distance of an antiscatter grid from a focus of a source of a beam, and compensating for image disturbances in a radiation image recording based on the amplifying, the image disturbances being caused by defocusing of the antiscatter grid arranged in a beam path and focused with respect to a specific distance from the focus of the source of the beam, and by a defocusing-dictated attenuation of primary radiation incident on the radiation image receiver as claimed.

With regard to claim 30, although the prior art discloses an apparatus comprising means for generating a beam including a focus, means for detecting the beam including radiation-sensitive pixels arranged in matrix form, and an antiscatter grid arranged between the means for

generating a beam and the means for detecting, it fails to teach or fairly suggest means for the pixel-wise amplification of at least some of the signals supplied by the means for detecting in a manner dependent on the actual distance of the antiscatter grid from the focus as claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

4. Applicant's arguments filed 02 February 2006 with respect to the specification have been fully considered and are persuasive. The objection of the specification has been withdrawn.

5. Applicant's arguments filed 02 February 2006 with respect to claims 1-30 have been fully considered and are persuasive. The objections of claims 1-30 have been withdrawn.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Kurakake (U. S. Patent No. 5,198,680) disclosed that focused collimators cause sensitivity to vary from a central region of a detector to a peripheral region of the detector, which requires appropriate correction of the detector output (column 2, lines 64-68).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen C. Ho whose telephone number is (571) 272-2491. The examiner can normally be reached on Monday - Friday from 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward J. Glick can be reached at (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Allen C. Ho

Allen C. Ho
Primary Examiner
Art Unit 2882

14 February 2006